

```

<HTML>
<HEAD>
<META HTTP-EQUIV="Content-Type" CONTENT="text/html; charset=windows-1252">
<META NAME="Generator" CONTENT="Microsoft Word 97">
<TITLE>AnneS home</TITLE>
<META NAME="Template" CONTENT="D:\Program Files\Microsoft
Office\Office\html.dot">
</HEAD>
<BODY LINK="#0000ff" VLINK="#800000" BACKGROUND="home11.gif">

<TABLE CELLSPACING=0 BORDER=0 CELLPADDING=7 WIDTH=726>
<TR><TD WIDTH="48%" VALIGN="TOP" COLSPAN=3>
<P><IMG SRC="heyani.gif" WIDTH=317 HEIGHT=105></TD>
<TD WIDTH="52%" VALIGN="BOTTOM">
<P ALIGN="CENTER">Are you interested in taking computer and technology
classes this summer? Check out the summer schedule being offered by <B><FONT
FACE="Comic Sans MS" COLOR="#ff0000">Anne A. Stenberg</B></FONT>, Visiting
Instructor at <B>The University of Montana, Department of Computer
Science</B>!</TD>
</TR>
<TR><TD WIDTH="38%" VALIGN="MIDDLE">
<P ALIGN="CENTER">Anne is a Montana certified business and computer science
teacher with over 15 years technology experience. All of her courses utilize
"hands-on" activities, individualized and team based learning with practical,
useful projects!</TD>
<TD WIDTH="62%" VALIGN="BOTTOM" COLSPAN=3>
<P><IMG SRC="magicbus.gif" WIDTH=407 HEIGHT=47></TD>
</TR>

```

Programming with HTML

Module created for Girl-Tech 2000
Project supported by Carl Perkins funding

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INTRODUCTION

HTML (HyperText Markup Language) is the main scripting language, or set of codes, used to create and build web pages you view on the Internet's World Wide Web. (Notice that the Internet and the World Wide Web are not one and the same. The Internet has been around since the 1960s and the World Wide Web began, as a subset of the Internet, in the early 1990s.) There are many web editors available such as Microsoft FrontPage, HotDog, etc., but you can use the simplest editor, Notepad, that comes with Microsoft Windows to create your pages.

HTML scripting is much different than word processing because it is NOT WYSIWYG (what you see is what you get). When you create a word processing document, what you see on the screen is the way the document will print on the printer. This is not so with HTML. HTML is written with codes, or tags, that let the browser (Internet Explorer or Netscape Communicator) know how to display the pages. HTML includes elements which will be discussed later.

- Headers
- Paragraphs
- Various types of character highlighting
- Inline images
- Hypertext links
- Lists - including nesting
- Preformatted text
- Simple search facility
- Tables

To further explain this concept, carefully look at the following code:

```
<HTML>
<HEAD>
<TITLE>Sample HTML document<TITLE>
</HEAD>
<BODY>

<P>Hello, my name is Anne Stenberg.</P>
<P>You can reach me via e-mail at <A
HREF="mailto:stenberg@cs.umd.edu">stenberg@cs.umd.edu</A></P>
</BODY>
</HTML>
```

The previous code looks similar to this when viewed in a browser:

Hello, my name is Anne Stenberg.
You can reach me via e-mail at stenberg@cs.umd.edu

Can you find similarities between the code and the information that displays in a browser? For example, can you find the first sentence in the code? Look at the information below the line that has the code `<BODY>`.

Before we delve into the various tags and elements, let's discuss how to develop and structure web documents.

STRUCTURE & DEVELOPMENT OF WEB PAGES

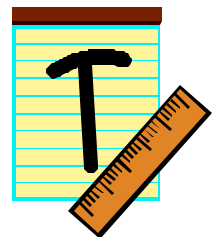
Step 1: Determine How to Structure your Web Site

There are two main ways to structure web sites--linear or hypermedia. When you create your web site using the **linear** method, you structure it in the order you want the material presented to the viewer. You want viewers to go from A to B to C to D etc. This is similar to reading a novel. You read page 1, then page 2, page 3, page 4, etc until you finish the book. Sometimes there may be opportunities to go back a page, but usually, linear scriptwriters do not put this into each page--they feel the viewer can use the back button on the browser to accomplish this task.

Non-linear or **hypermedia** structures allow the reader to follow almost any tangent he/she wants. This is the way the majority of web sites are created today. The scriptwriter, or author of the web site, must provide pathways, or hyperlinks, to the other pages within the site.

Step 2: Create an Outline

Each topic of your web site should have it's own page. If you're using Microsoft® Word, or another word processing program to create your web site, this would mean that each topic is a separate document. With this in mind, one of the easiest ways to create an outline is to write each topic on a separate piece of paper. (Yes, you still need paper and pencils! ☺) You will use these papers, with the topics listed on each one, to later draw a rough sketch of each web page. As you create your web pages, you will provide hyperlinks to your homepage and the other pages within your site. Hyperlinks give viewers a way to browse around your site without having to type each web page address separately.




Step 3: Define the Document or Web Site Goals

Before going any further, ask yourself this question, "When a reader has finished reading my work, what do I want him/her to know?" It is extremely important to keep this question in mind while designing and developing your web site. You want people to come back and visit often. Do you have sites you enjoy visiting more than others? What makes those sites intriguing to you? Besides the look and ease of use, it's probably the content.

Bringing up the look of web sites brings us to the next point. You should create a web site with a consistent look or style that is carried throughout the site. Why? There are several reasons:

- 1.) You may decide to publish the document on paper
- 2.) Readers should constantly be aware of who you are
- 3.) Lack of consistency presents a scattered, unprofessional image

Step 4: Keep the Four Elements of Each Web Page in Mind

- 1) **Identity**--this element makes it easy for viewers to recognize you and your web site by way of logos or certain phrases. When you hear the phrase "Where do you want to go today?" you automatically associate that with Microsoft®. T-shirts with this logo,  identify it as a Nike™ product. When designing your logo or phrase, think of what makes you unique. What qualities do you have that are unlike your friends? What are your favorite colors? What do you like to do the best?
- 2) **Look**--this element applies to visual appeal, amount of white space, depth of introduction, ease of access, and the size of graphics.
 - a) Visual appeal takes on many avenues. You may prefer dark colored backgrounds with light colored words. Others may prefer light backgrounds with dark words. Still, some people like black words on white backgrounds. Whichever type of visual effects you choose, make sure they are appropriate to your content.
 - b) White space deals with "blank" areas that are not necessarily white in color. You use white space to guide your readers eyes to where you want them to look. White space also makes reading easier as the page doesn't appear cluttered.
 - c) The introduction is usually on your first, or home page. Since a web site generally contains more than one page, you don't want to give away your "secrets" on the first page. Make the introduction brief and to the point so your readers will want to go further into your web site.



- d) Ease of access means your viewers can go from one page to another without having to search to find the hyperlinks. You accomplish this by having multiple links to the same page in various forms. If you mention something about a different page, then create a hyperlink on that word, or words, to direct readers to that particular page. Some web masters create a table of contents with links to each of the sites' pages. Pictures and clipart make great visual aids that get the readers attention; again, the picture/clipart needs to be related to the topic of the page to which it is going.
- e) Too much information can be distracting and make visitors "click on by". For this reason, use the K.I.S.S. method. K.I.S.S. stands for Keep It Short and Simple. "Less is more" should be your philosophy you use with your web sites.

Step 5: More Information to Keep in Mind

- ◆ Keep it simple - no more than 50% of screen covered
- ◆ Use a variety of text styles - headings, body text, text attributes
- ◆ Include graphic or two
- ◆ Be consistent
- ◆ Give people reason to visit again

CREATING YOUR WEB DOCUMENT

All programming and scripting languages follow a certain syntax, or structure. Just as you have to follow certain sentence structures when writing, you must also follow certain syntax for each language for which you are coding. HTML, hypertext markup language, uses specific codes within angle brackets < >.

Most all codes for HTML have a beginning and ending tag. The beginning tag would be similar to <BEGINNING TAG> while the ending tag would be similar to </ENDING TAG>. The most important item to remember is the slash, /, in the ending tag. This slash tells the browser, which reads the code, that this is the end of this particular element. Elements are the combination of the beginning and ending tags. If, for some reason, you failed to insert the slash for the ending tag, the browser would treat the remaining text, graphics, etc as if the ending tag was not even there.

Other useful terms include "container" and "empty elements". A container is the information between the tags. Let's take a look at the following code:

<TITLE>My Personal Web Page</TITLE>

In our example, the container is "My Personal Web Page", the beginning tag is <TITLE>, and the ending tag is </TITLE>.

An empty element is one where there is a beginning and ending tag with no container. An example of an empty element would be <TITLE></TITLE>.

Two Main Sections

All web documents have two main sections: the head and the body. The head of the document contains, at a minimum, the following tags:

- ◆ <HTML> </HTML>
- ◆ <HEAD> </HEAD>
- ◆ <TITLE> </TITLE>

Notice that each element has a beginning and an ending tag.

The <HTML> tag **MUST** be at the beginning of your web document. This tag informs the browser of the type of document that is opening. When the browser sees that it is an HTML document, it automatically knows how to handle the text, graphics, sound, etc.

The Head

The <HEAD> tag allows the HTTP server to discover information about the document. The main tag between the beginning <HEAD> tag and the ending </HEAD> tag is the <TITLE> </TITLE> tag. The <TITLE> tag is the official title of that particular web page. The title will show up on the title bar at the top of the screen. (Remember that the title bar is the blue bar at the very top of all windows program screens.) Other values you can use in the head of the document include tags for a better description of the web site, keywords, and author information. When using these values, you must use the <META> tag. Refer to the following code segment to see an example of the head of a web page.

```
<HTML>
<HEAD>
<TITLE>Sample HTML document</TITLE>
<META name="DESCRIPTION" content="A sample HTML document with examples
of options for the head.">
<META name="KEYWORDS" content="HTML, head, sample">
<META name="AUTHOR" content="Anne A. Stenberg">
</HEAD>

<BODY>
.
.
</BODY>
</HTML>
```

The Body

The body of the document is below the head and contains the bulk of your web page. Within the body, you have many tags and options available. Some of the more common tags with their explanations are:

Common Tags

Beginning Tag	Ending Tag	Description
<BODY>	</BODY>	Body --all other tags go between the body tag and like Paul Harvey, "The rest of the story".
<!--	-->	Comment --doesn't print on the web page
<H1> <H2> <H3> <H4> <H5> <H6>	N/A	Heading --similar to word processing documents
<P>	</P>	Paragraph --adds one line at end of paragraph
 	N/A	Line Break Tag --ends lines without adding one line
<HR>	N/A	Horizontal Rule --inserts a horizontal line
		Unordered List --bulleted list
		Ordered List --numbered 1,2,3. . . list
		List Item --used for both ordered and unordered lists and is between the or tags
<DL>	</DL>	Definition List --prints on the web page in two columns, where the term is first, then the definition is indented below the term.
<DIR>	</DIR>	Directory List --a multicolumn directory list in no particular order
		Bold --makes the text between the tags bold
<I>	</I>	Italics --makes the text between the tags italicized
<U>	</U>	Underline --makes the text between the tags underlined
	N/A	Image Source --inserts an image in the web page from the destination shown to the right of the = sign
<A href>	</A href>	Anchor Hypertext Reference --text within this tag is hyperlinked to another document or web site
<TABLE>	</TABLE>	TABLE --inserts a table in the web document
<TR>	</TR>	Table Row --defines a table row
<THEAD>	</THEAD>	Table Header --defines a header row for the table
<TD>	</TD>	Table Data --defines the data in the table cell

DIFFERENCES BETWEEN REGULAR AND WEB DOCUMENTS

ACTIVITY 1: COMPARING THE DIFFERENCE BETWEEN WORD DOCUMENTS AND WEB DOCUMENTS

WHAT YOU'LL NEED

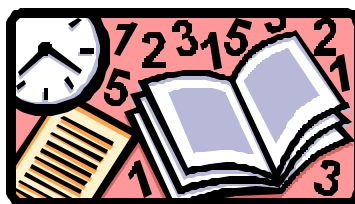
- ◆ Microsoft Office 97 (or above) with the HTML components installed with Word

PRE-ACTIVITY DISCUSSION

- ◆ Introduction
- ◆ Structure & Development of Web Pages
- ◆ Creating Your Web Document

DESIRED OUTCOME

Students should be able to identify the differences between web documents and regular word processing documents as it relates to graphics, layout, and WYSI WYG.



1. Open Word 97 to a new document
2. Create a flyer with a page border, text, clipart, and other features you deem appropriate. This flyer should be a spectacular work of art!
3. Save the flyer as *yourfirstname.doc* where you replace the words "yourfirstname" with your actual first name.
4. Print your flyer.
5. Next, save the flyer as an HTML document by clicking File, Save as HTML. (You may see a pop-up message stating that formatting could be lost when you convert the Word document to an HTML document. Read this message and accept the consequences since we already know that HTML is NOT WYSI WYG.)

By comparing the samples below to your documents, did any major things happen? Notice that the WordArt, page border, and layout did not stay the same on the two documents below. Did you notice anything else that changed on your own documents?



Sample of my Word Document flyer



Sample of flyer after being converted to HTML format

CREATING A WEB DOCUMENT FROM THE BEGINNING

Microsoft Office 97 makes it very easy to create web pages from "scratch" if the software has been loaded with all the web page creation options installed. Assuming this is the case, let's start from the beginning and create a web document.

ACTIVITY 2: BEGIN AT THE BEGINNING

WHAT YOU'LL NEED

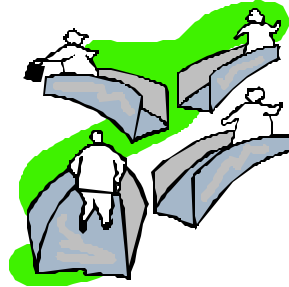
- ◆ Microsoft Office 97 (or above) with the HTML components installed with Word



PRE-ACTIVITY DISCUSSION

- ◆ Completion of Activity 1

DESIRED OUTCOME

By the end of this activity, students will have created their own web page complete with graphics, clipart, background, and table.



1. Open Word 97
2. From the drop-down menu, select File, New.
3. Click the Web Pages tab and choose Blank Web Page. *(Notice you also have the option to choose "Web Page Wizard", but this way is much more fun!)*
4. Choose Horizontal Line. . . from the Insert menu. (Did you notice all the options? If you don't like those, click the More tab!) After you decide on a horizontal line, click the Insert tab or press <ENTER>.
5. Your cursor should be at the beginning of the next line. Type your name and press <ENTER>.
6. Select the line your name is on.
7. Change the font, size, and color to your liking. To increase the font, press the  key on the formatting toolbar. To decrease the font, press the  key on the formatting toolbar. When you are satisfied with the way your name looks, press the down arrow key to go down the the next line.
8. Insert another horizontal line below your name.

Here is an example of what yours should look like;
however, your choices will be far better than mine!



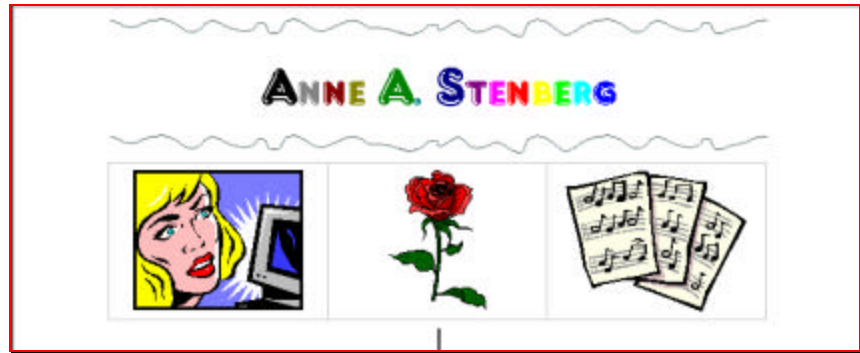
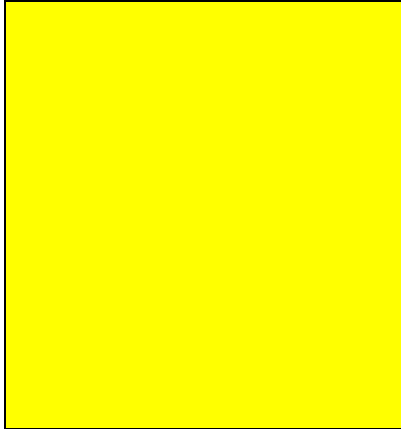
9. Save your work! When this file saves, it will have a file extension of .htm or .html. This means the file is saved in HTML format and can be viewed in a browser.

The best way to format your web document so text and pictures wrap correctly is to place them in tables.

10. Click **Table** from the drop-down menu, choose **Insert Table** and select a 1x3 Table.
11. To center the table below the horizontal line, move your mouse pointer to the right edge. When the mouse pointer changes into \leftrightarrow , click and drag with the left mouse button to resize the table's edge. Use the same procedure to align the left side of the table with the horizontal line above.
12. Select all three cells of the table and choose **Distribute Columns Evenly** from the **Table** menu.



13. Insert a ClipArt in each of the table's cells. Try to pick ones of things you like to do such as basketball, music, etc. (You may need to resize the clipart so it fits within the cell.)



14. Save your work!

You have just created a web page using Microsoft Word 97! Let's look at the HTML coding we learned about earlier on the document you just created.

ACTIVITY 3: GOING BEHIND THE SCENES TO CHANGE THE TITLE

WHAT YOU'LL NEED

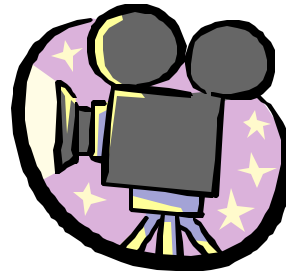
- ◆ Microsoft Office 97 (or above) with the HTML components installed with Word

PRE-ACTIVITY DISCUSSION

- ◆ Completion of Activity 2

DESIRED OUTCOME

Students should be able to identify and change various tags and elements in a web document.



1. Using the document you created in Activity 2, click View, HTML Source from the Menu Bar.
2. The "head" portion of your HTML source should be similar to this:

```
(1) <HTML>
(2) <HEAD>
(3) <META HTTP-EQUIV="Content-Type"
    CONTENT="text/html; charset=windows-1252">
(4) <META NAME="Generator" CONTENT="Microsoft
    Word 97">
(5) <TITLE>HTML_sample_document</TITLE>
(6) <META NAME="Version" CONTENT="8.0.3410">
(7) <META NAME="Date" CONTENT="10/11/96">
(8) <META NAME="Template" CONTENT="D:\Program
    Files\Microsoft Office\Office\HTML.DOT">
(9) </HEAD>
```



Pop-up warnings, shown with an exclamation mark inside a yellow triangle, generally are written in words easily understandable. One of the key things to remember is to **READ** the messages **BEFORE** you start clicking buttons.

Note: The line numbers in parentheses ARE NOT part of the actual HTML code but put here so we could reference various lines.

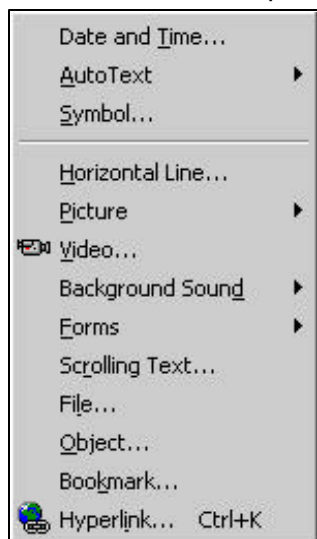
3. Locate the <TITLE> tag. *In the example it's on line 5.*
By default, the title of your document is the same as the file name under which you saved the document. Oftentimes, you'll want to change the title to something more meaningful.
4. Select the text between the beginning and ending <TITLE> tag.
5. Replace the text with your name.

```
(1) <HTML>
(2) <HEAD>
(3) <META HTTP-EQUIV="Content-Type"
    CONTENT="text/html; charset=windows-1252">
(4) <META NAME="Generator" CONTENT="Microsoft
    Word 97">
(5) <TITLE>Anne A. Stenberg</TITLE>
(6) <META NAME="Version" CONTENT="8.0.3410">
(7) <META NAME="Date" CONTENT="10/11/96">
(8) <META NAME="Template" CONTENT="D:\Program
    Files\Microsoft Office\Office\HTML.DOT">
(9) </HEAD>
```

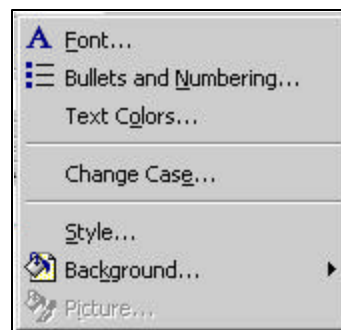
6. Click the Exit HTML Source button on the Standard Toolbar.
7. Click the Yes button when the pop-up message asks "Do you want to save changes to *yourdocumentname.htm?*".
8. Microsoft® Word automatically takes you back to your WYSIWYG version of your HTML document. Notice the title changed from the file name to your name.
9. Save your document.

As you have just found out, HTML scripting language is not that difficult to learn. The key is to READ THE SCREEN. You can easily switch from on-line view to HTML scripting view on any web page created in Microsoft® Word by choosing HTML Source from the View Menu Bar. Now, let's make some more enhancements to our web document!

From your main web page, go ahead and add a background, some introductory text, sound, and other pictures. To add a background or



bullets and to change the font or text colors, choose Format from the Menu Bar (*shown at right*). To add a horizontal line, picture, video, sound, and other items, choose Insert from the Menu Bar (*shown at left*).



When you have completed your first, or home page, you are ready to begin creating the rest of the pages to develop your web site.

Create the remaining pages of your web site using the methods learned from Activities 2 and 3, saving your work periodically. After you have created all the pages for your web site, you are ready to link the pages together.

CREATING HYPERLINKS

You can create hyperlinks to your different pages on pictures, text or both. A lot of "web-weavers" use both ways, using pictures and text, to increase the readers' chances of viewing the entire web site.

Three Main Types of Links

- ◆ Intra-page
- ◆ Intra-system
- ◆ Inter-system

An **intra-page link** is a hyperlink(s) that take you to a different place within that page. Intra-page links are also called **bookmarks**. To further explain, think of web pages you have visited that have arrows going right or left, or words directing you to the top of the document. These are intra-page links or bookmarks. You want to make sure you check the box to keep the hyperlinks relative. (More about this in Activity 5.)

An **intra-system link** is a hyperlink(s) that connects your different web pages within your own web site. For example, if you have ten pages in your web site,

intra-system links connect each of your pages to each other. Again, you want to check the box to keep the hyperlinks relative.

An **inter-system link** is a hyperlink(s) that connects your web page to another page on the Internet. When you create an inter-system link, you use the full URL (Uniform Resource Locator) or address to specify where to find the web page on the Internet. Since you are linking to another page on the Internet, not within your site, you do not want to check the box to keep the hyperlink relative.

ACTIVITY 4: CREATING A BOOKMARK ON YOUR WEB PAGE

WHAT YOU'LL NEED

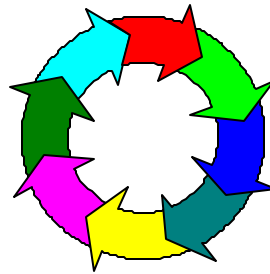
- ◆ Microsoft Office 97 (or above) with the HTML components installed with Word

PRE -ACTIVITY DISCUSSION

- ◆ Completion of Activities 1-3

DESIRED OUTCOME

Students should be able to create intra -page links, or bookmarks, within a web page.



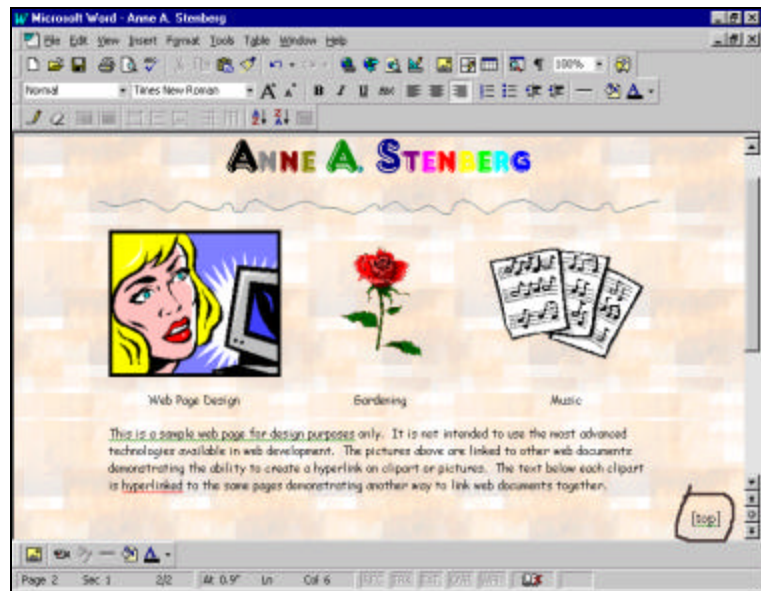
1. Open the web document you created in Activity 2 if it is not already open.
2. Press <CTRL><HOME> to go to the beginning of your document.
3. From the Insert on the Menu Bar, choose Bookmark.
4. Since you are at the very beginning of your web document, just name the bookmark TOP.




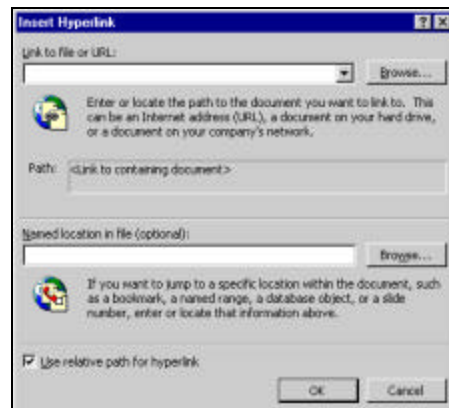
5. Press the Add button and the program takes you to

your document.

6. Press <CTRL><END> to go to the very end of your document.
7. Make sure you are on a blank line, click the rightalign button on the formatting toolbar and type [top] (including the brackets).

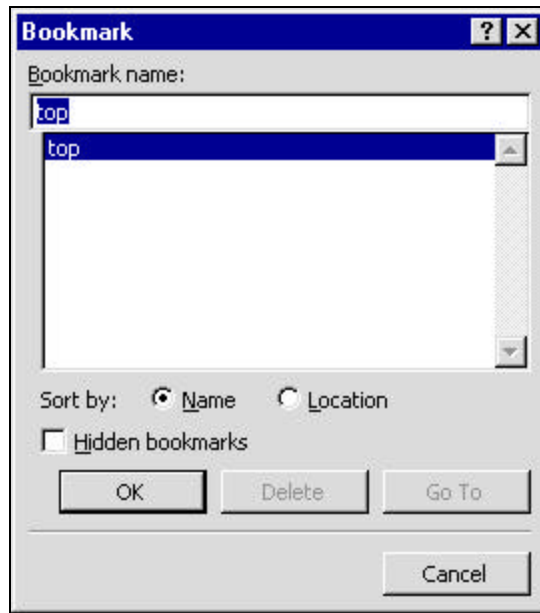


8. Select the entire word, including the brackets, and press the Hyperlink  button on the standard toolbar to create the bookmark.
9. From the Hyperlink dialog box, locate the area toward the middle of the box called "Named Location in File (optional):" and click the Browse button.



You will only see the one bookmark you created called "top" because

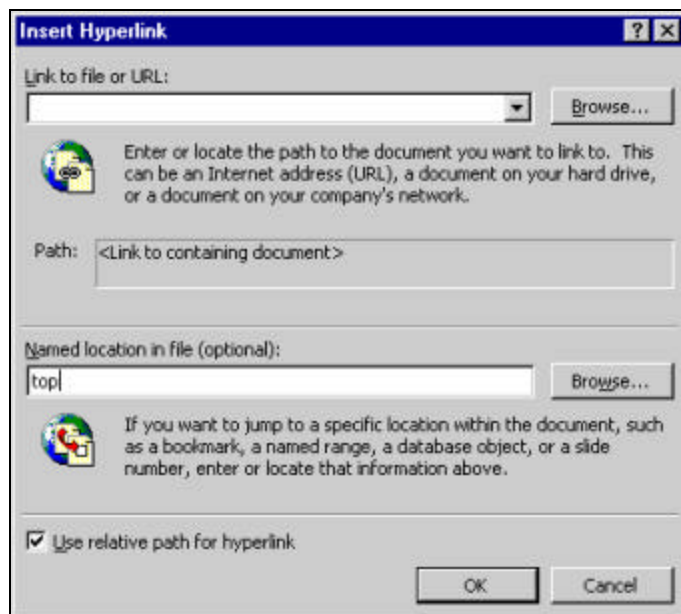
you haven't created any others yet.



10. Click OK to create the bookmark to the top of your web page.

When you have more than one bookmark, you will need to choose the correct one for linking.

11. You are immediately taken back to the Insert Hyperlink dialog box and your bookmark will now be listed in the correct section.



12. Click OK and your bookmark is created.

The Code Behind the Bookmark

After you have created your intra-page link, or bookmark, view the HTML source to see what happened behind the scenes. You will be looking for two pieces of code; one indicating the top of the document and the other one showing the hyperlink to the top of the document.

The top of the document code should be similar to ``. Remember from earlier discussions that the `<A>` tag refers to Anchor and the name of the anchor equals top - just what you told it to do in Activity 4.

The hyperlink coding should be similar to `[top]` which means the Anchor Hyperlink Reference equals top and the text for the hyperlink is [top].

The major difference in coding between bookmarks (inter-page links) and inter-system links is the pound (#) sign before the hyperlink reference. The pound sign is necessary for the program to know it is looking for a bookmark instead of a document named [top].

For clarity, an intra-system link will be similar to

```
<A HREF="filename.htm">File Name</A>
```

and an inter-system link will look like

```
<A HREF=http://www.siteName.com>Site name</A>.
```

ACTIVITY 5: CREATE YOUR LINKING PAGES

WHAT YOU'LL NEED

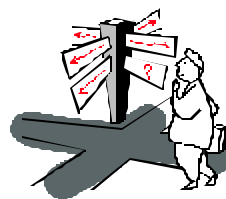
- ◆ Microsoft Office 97 (or above) with the HTML components installed with Word


PRE-ACTIVITY DISCUSSION

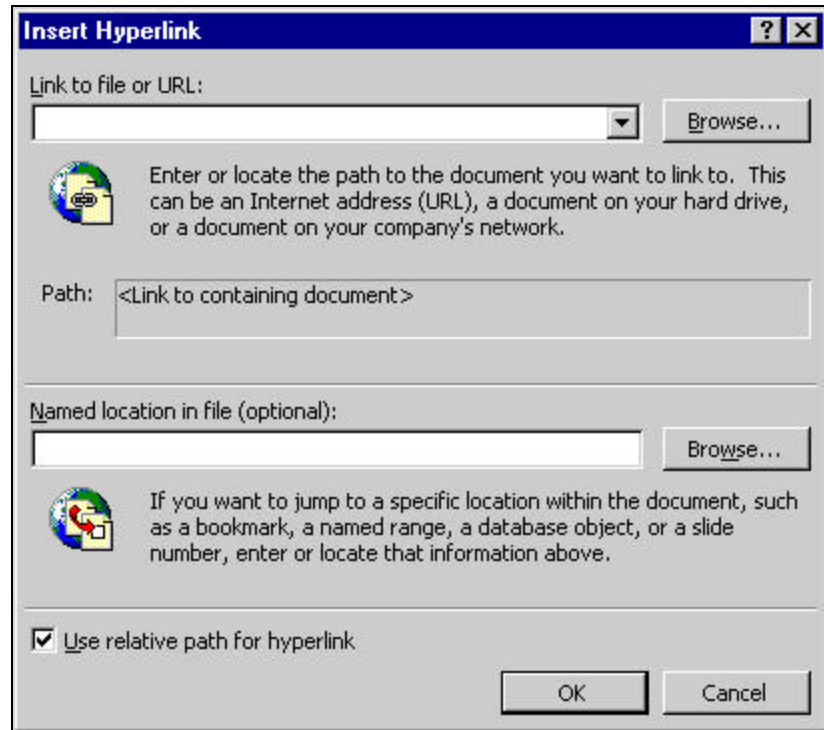
- ◆ Completion of Activities 1-3.

DESIRED OUTCOME

Students will have a complete web site at the end of this activity.

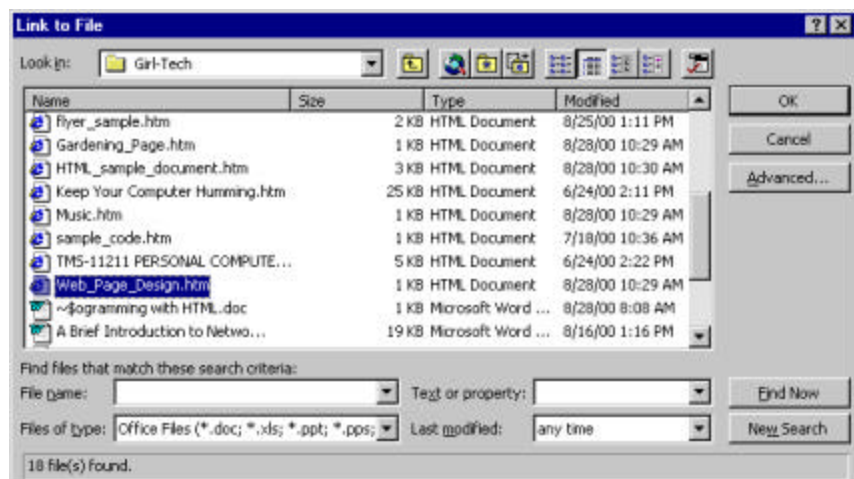


1. To create a hyperlink using a picture or clipart, select the appropriate clipart.
2. From the Standard Toolbar, choose the Hyperlink icon  and the following dialog box will pop up.

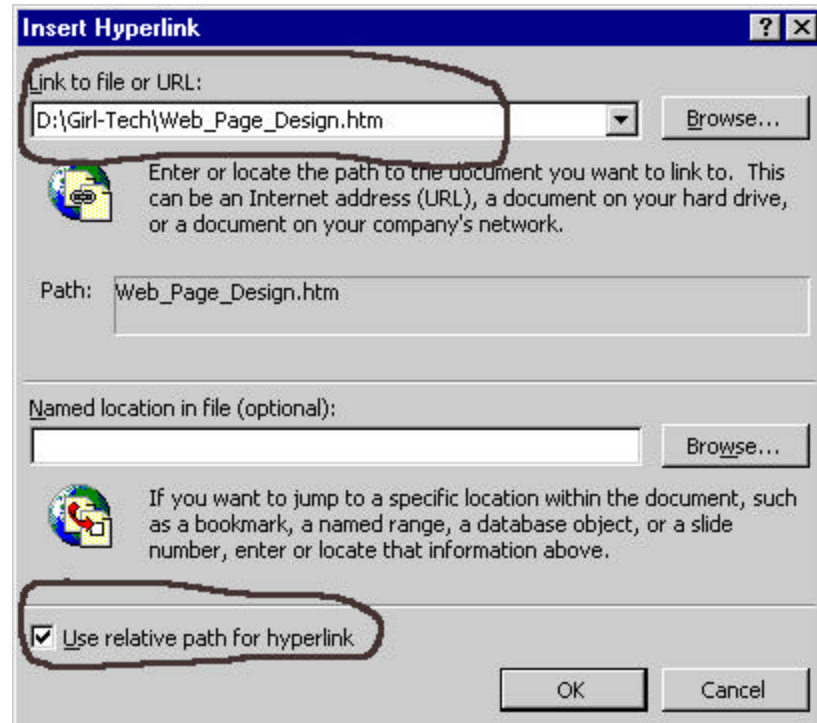


Before going any further, READ THE SCREEN. Since you are linking from this page to another document, you need to tell the original document where to look for the other document.

3. Click the **Browse** button at the top right of the dialog box to locate the particular file.
4. A new dialog box will appear allowing you to find the document to which you are creating a hyperlink.



5. When you have located the file to which you are linking, click the **OK** button or press <ENTER>.



6. The program immediately takes you back to the original dialog box but now contain the file to which you are linking.

Notice the two circled items--the top circled item shows the exact path where your file is located on your harddrive or floppy. The bottom circled item, when checked, indicates to use the relative path for the hyperlink. This means that when you upload your web pages and images to a web server, the server will be able to find your hyperlinked pages regardless of where you saved them on your harddrive or floppy.

7. To create a hyperlink on text, select the text on your web page and follow steps 2-6 of this activity.
8. Save your work!

As you can see, creating web pages using Microsoft® Word is rather easy. While you're limited somewhat by the program, it is still an excellent tool for beginners. Once you're comfortable creating simple web pages, you can study the HTML code of pages on the World Wide Web to learn how to create pages that are more extensive.

Microsoft® Office 2000 has incorporated themes into Word's web page creation tool giving you options such as frames, ActiveX controls, web bots, and more.

OTHER USEFUL INFORMATION

When creating web documents using Microsoft® Word, create them using the web page templates. This ensures you have the necessary web page creation options that are different than regular Word options.

For some reason, all images are saved with filenames beginning with *image*; however, you can change these to names that are more useful and meaningful.

Anytime you make changes to the actual HTML code, be sure to save the file when going back to the on-line view. Save changes often in case the power goes out or the "little green monsters" get hungry.

Always remember that each web page is a different document and all the web documents make up a web site.

SOME USEFUL WEB AUTHORING SITES

- ◆ <http://reallybig.com/>
contains clipart, animated gifs, backgrounds, etc
- ◆ <http://www.december.com/html/3.2/element/index.html>
HTML 3.2 element definitions
- ◆ <http://developer.netscape.com/docs/manuals/htmlguid/index.htm>
HTML Tag Reference
- ◆ <http://www2.utep.edu/~kross/tutorial/>
Nice HTML Tax Reference Tutorial
- ◆ <http://www.december.com/html/demo/basic.html>
A sample HTML document with explanations
- ◆ <http://www.december.com/html/demo/tricks.html>
some questions & answers about HTML
- ◆ <http://www.december.com/works/hcu/quickref.html>
Quick Reference Guide
- ◆ <http://www.december.com/html/>
Some good HTML "stuff"
- ◆ <http://www.werbach.com/barebones/>
An HTML tutorial type site

- ◆ <http://www.werbach.com/barebones/barebone.txt>
Textual explanation of HTML
- ◆ <http://www.webreference.com/>
All types of "free" graphics
- ◆ <http://metalab.unc.edu/pub/packages/infosystems/WWW/tools/mapedit/>
A shareware program to create maps and "hot spots" on your web pages

A DESIGN CHECKLIST

- ❑ Let readers know who you are. Be sure to sign your Web pages and provide an e-mail address
- ❑ Use headings as headings. Don't use a heading for a note or warning just because of the formatting. New HTML tools and Web browsers take advantage of HTML coding; using headings incorrectly would create an outline or table of contents that was unusable.
- ❑ Give readers a way to go home again. Every subsequent page should include a link back to the home page.
- ❑ Don't use the phrase click here. This not only insults the intelligence of your reader but it is a non-descriptive way of presenting information.
- ❑ Organize your pages so they are independent of each other. If you need to present a long document, such as documentation or a manual, include a link to the file in a portable document format.
- ❑ Copyedit and spell check your document. Grammatical errors and misspellings are annoying and can confuse your reader. Publishing a web page filled with errors also affects your credibility.
- ❑ Don't use too many links and emphasis tags. This can make your page dark and difficult to read.
- ❑ Be consistent with the design of your Web pages. For example, don't mix two disparate types of images, such as color digital photos and black-and-white clip art.
- ❑ Publish two presentations of your site if your site includes more than a couple of inline images. Create one that takes advantage of graphics for users with fast connections and the other that is primarily text-based. This way you address anyone using a text-based browser and the person who wants to get the information quickly without having to wait for the graphics to download.

- ❑ Interlace your inline images. This lets users start viewing your page quickly without having to wait for images to download.
- ❑ Keep in mind text-based browsers by including the Alternate text attribute and alternate text.
- ❑ Keep your images small--up to about 50k. Large images can be time-consuming to download and may frustrate readers with slow modem connections.
- ❑ Use thumbnails for large images. This lets readers decide which images they want to view in a larger size.
- ❑ Include the size of the file in the text if you include links to a large file, such as an image, sound, or video file. This gives users some idea of how long it will take to download the file.
- ❑ Test your links to other Web pages. Many Web publishers have the best intentions when publishing a Web page, but don't take the time to ensure that the links work and are up to date.
- ❑ Provide access to a sample, rather than an actual product, you want to sell. Putting a product online on an unsecured site is one way to invite trouble. Some hackers may take this as a challenge.
- ❑ Include table of contents, indexes or cross-references for long Web documents. You want readers to be able to go directly to the page or section that contains the information they want.
- ❑ Give readers a reason to come back. Present a service such as up-to-date information on a unique topic, an online comic, a contest or something that will give readers an incentive to return.
- ❑ Validate your Web pages before you publish them to make sure you haven't broken any HTML coding rules or over-looked any design mistakes.

TEXT REFERENCES

<http://www.htmlgoodies.com/tutors/sitelinks.html>

<http://www.builder.com/Authoring/Html/?st.bl.au.au4.feat.1116>

<http://www.builder.com/Authoring/Newbies/?st.bl.au.au5.feat.1560>

<http://www.ncsa.uiuc.edu/General/Internet/WWW/HTMLPrimer.html>

More Excellent HTML with an Introduction to JavaScript, Timothy T. Gottleber & Timothy N Trainor, 2000, ISBN 0-07-233745-1 Part of 0-07-233839-3

PICTURE REFERENCES

Clipart is from Microsoft Office CD and
Microsoft ClipArt Gallery On-Line

COMPUTER SCIENCE ADVANCED PLACEMENT INFORMATION

The AP exam for Computer Science is based on the C++ computer language. College Boards Online Advanced Placement Program for Advanced Placement in Computer Science is located at <http://www.collegeboard.org/ap/computer-science/>. It includes the course description for 2001, specific information regarding the A Course and the AB Course, sample questions, teacher resources, and much more.

The top ten reasons to take AP Computer Science is at <http://www.kcd.louisville.ky.us/kcd/cs/topten.html> (this is funny!)

A marketing site with AP computer Science books, sample tests, etc at <http://www.dsmarketing.com/text5.htm>.

Sample syllabi for the AP Computer Science A http://www.skylit.com/syllabi/syll_a.html

A dated site (1996) on teacher training for APCS is at <http://www.ict.org/ttraining/index.html>. While the site is old, interested people could probably contact the organization for updated information.

A California high school APCS web site at <http://monte.mvhs.srvusd.k12.ca.us/~apcs/>.

The Department of Computer Science web site at The University of Montana is <http://www.cs.umt.edu>.